

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



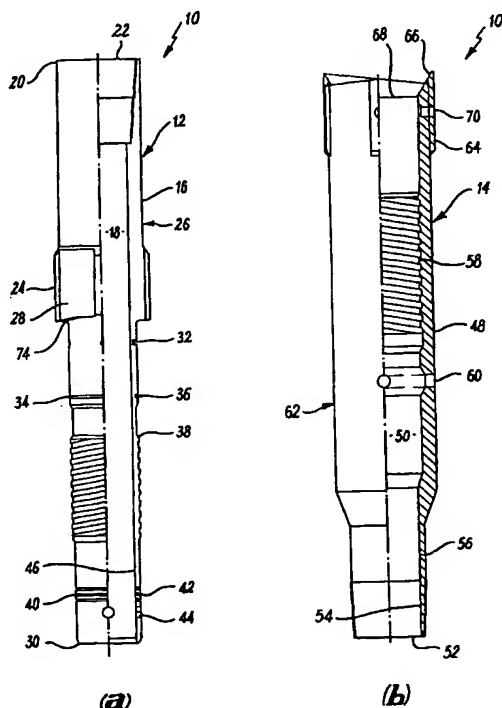
(43) International Publication Date
6 May 2005 (06.05.2005)

PCT

(10) International Publication Number
WO 2005/040547 A1

- (51) International Patent Classification⁷: **E21B 17/042**, 17/06, 43/10
- (21) International Application Number: **PCT/GB2004/004289**
- (22) International Filing Date: 11 October 2004 (11.10.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data: 0324028.0 14 October 2003 (14.10.2003) GB
- (71) Applicant (for all designated States except US): **SPECIALISED PETROLEUM SERVICES GROUP LIMITED** [GB/GB]; Arnhall Business Park, Westhill, Aberdeen AB32 6UF (GB).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): **TELFER, George** [GB/GB]; 19 Grosvenor Place, Aberdeen AB25 2RE (GB).
- (74) Agent: **KENNEDYS PATENT AGENCY LIMITED**; Floor 5, Queens House, 29 St Vincent Place, Glasgow G1 2DT (GB).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, [Continued on next page]

(54) Title: DOWNHOLE CONNECTOR



(57) Abstract: A releasable connector (10) for joining tubular members in a well bore. The connector (10) is a mating screwthread (38, 58) which is terminated on each member by abutting projections (24, 64), operating as a ratchet. This ensures torque is transmitted between the members in a uni-directional manner so that make-up torque is never applied to the screwheads when torque is applied to the members. A running tool (12) and a method of setting a liner in a well bore is also described which incorporate the connector (10) so that the liner may be part of a drill string and is left cemented in place in the well, after drilling is complete.

WO 2005/040547 A1



GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.